Thompson/Center

R55

Owner's Manual

⚠ DANGER

The material in this booklet must be read and understood before attempting to use your Thompson/Center firearm. If pertinent safety information is not read, and —⚠WARNING— statements are not understood and adhered to, death and/or injury may result.

READ THIS MANUAL IN ITS ENTIRETY BEFORE USING YOUR FIREARM

Thompson/Center Arms Co., Inc.
P.O. Box 5002
Rochester New Hampshire 03866

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IMPORTANT NOTE:
Separate Owner's Manuals for any other models which Thompson/Center offers are available free from the factory upon request. Call or write with your specific needs.

This booklet contains information that is essential to the safe use and maintenance of Thompson/Center's Model R55 semi-automatic rifle. You must read this material in it's entirety and fully understand its significance before you can safely use your Model R55 Semi-Auto Rifle. If a Thompson/Center Model R55 Semi-Auto Rifle is loaned or sold (by an individual or dealer), this booklet must accompany the firearm. Replacement booklets are available at no charge from our factory at the address below.

If, after reading this booklet, you still have questions concerning the safe use of your Thompson/Center firearm, write or call our Customer Service Department at:

Thompson/Center Arms Co., Inc.
Farmington Road, P.O. Box 5002
Rochester, New Hampshire 03867
Telephone: 1-603-332-2333

• And Remember •
The Fundamental
National Rifle Association
Rules for Safe Gun Handling Are:

1 - Always keep the gun pointed in a safe direction.
2 - Always keep your finger off the trigger until ready to shoot.
3 - Always keep the gun unloaded until ready to use.

WARNING

Discharging firearms in poorly ventilated areas, cleaning firearms or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.

Introduction To The T/C Model R55 Semi-Auto Rifle

Designed as a Hunting/Sporting rifle, the T/C Model R55 semi-automatic is a magazine-fed rifle that is relatively simple to understand and safe when the required ingredients of "common sense" and "safe gun handling" are applied to its use and care. The T/C Model R55 semi-automatic rifle may operate differently than other semi-automatic rifles on the market. It is important that you identify your rifle as being a T/C Model R55 Semi-Auto Rifle in conjunction with reading these instructions. They apply to the T/C Model R55 Semi-Auto Rifle only. Do not assume that a familiarity with other firearms has equipped you with a knowledge of "safe gun handling" as these words now apply to your T/C Model R55 Semi-Auto Rifle. Each gun design is different from another and each functions accordingly.

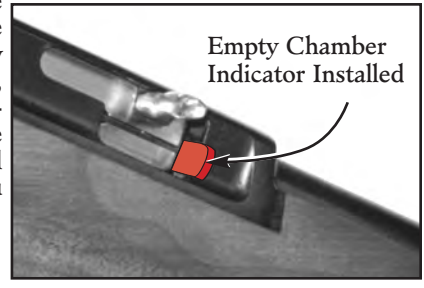
All machines, be they chain saws, automobiles, lawn mowers or firearms are built to function as mindless mechanical slaves. They serve only as well as your intellect dictates. Carefully used, your chain saw will cut up a winter's supply of firewood. Carelessly used, your chain saw will cut other things with able willingness. A firearm is no different; it is equally non-selective as to target or purpose.

In as much as the responsibility for the use of a firearm rests with its user, you must understand the mechanics before you can shoulder the responsibility for its use. That is what this booklet is all about.

YOU MUST READ THIS MATERIAL BEFORE USING THE THOMPSON/CENTER Model R55 RIFLE.

Empty Chamber Indicator

Your T/C Model R55 rifle was shipped from the factory with a red plastic Empty Chamber Indicator located in the chamber. The presence of this Empty Chamber Indicator shows that the chamber of your T/C Model R55 does not have a cartridge present in it. The plastic indicator can only be inserted into an empty chamber. It is a good idea to have this indicator inserted into the chamber when the rifle is not in use. We use it here on the assembly line; you should use it also. If, after purchasing your rifle you notice that this indicator is not in the chamber of your rifle, stop what you are doing and immediately check the chamber of your rifle. Keeping the rifle pointed in a safe direction, put the safety in the rearward "ON" position, manually pull back on the bolt handle and visually inspect the chamber. Only after you have positively ensured that the chamber is empty, should you proceed with your familiarization of the rifle. If you cannot locate the red Empty Chamber Indicator, call or write the factory and we will send you one at no charge.



General Rules for the Safe Use and Handling of the T/C Model R55 Semi-Auto Rifle

⚠WARNING

Follow the rules for use and handling of the T/C Model R55 Semi-Auto Rifle. FAILURE TO FOLLOW THESE RULES MAY CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

1. If you are unfamiliar with firearms seek professional instructions. Qualified organizations such as local gun clubs, the National Rifle Association and State Hunter Safety programs offer courses which teach safe gun handling and proper hunting procedures. Those who are unfamiliar with firearms should seek guidance from an instructor who is qualified by one of these organizations.

2. The T/C Model R55 rifle is shipped from the factory with a red plastic Empty Chamber Indicator inserted into the chamber of each rifle. This indicator shows that the chamber does not contain a cartridge. If, when examining your Model R55 rifle, you do not see this Empty Chamber Indicator, assume the rifle may have a round in the chamber, and immediately inspect the chamber, making sure that the rifle is pointed in a safe direction, the manual safety is engaged in the "ON" position, and your finger is off the trigger. **Warning: Treat every firearm as if it were loaded. Failure to heed this warning may cause injury and/or death to the shooter or bystanders, and damage to property.**

3. Always point the muzzle of your rifle down range. The possibility of accidental discharge is a constant danger when using a firearm. If the muzzle is pointed downrange, away from yourself, other people, domestic animals or property, then there can be no injury or damage from an accidental discharge.

4. Never load your T/C Model R55 Semi-Auto Rifle until you are ready to fire it. If your rifle is not loaded until you are ready to fire and you are directing your full concentration to it and the target then there can be no accidental discharge of the rifle. Never transport or carry a loaded rifle in a vehicle. Never hand a loaded rifle to another person. Never store a loaded rifle in your home. Never cross a fence, climb a tree, jump a ditch or engage in any activity which distracts your attention while holding or carrying a loaded rifle. Never attempt to clean a loaded rifle.

5. Be physically fit and mentally alert when using your T/C Model R55 Semi-Auto Rifle. The use of your rifle involves forceful physical actions which require strength and concentration. Never use alcoholic beverages or drugs

before shooting or handling your rifle. Never use your rifle when you are overly tired. If you use medication or have medical implants consult your physician before using your rifle.

6. Know the condition of your T/C Model R55 Semi-Auto Rifle before firing. Be sure the rifle is loaded with the proper ammunition as cited on the barrel of the rifle as well as in the manual. Be sure the barrel is clear of obstructions (including oil, mud, dirt, snow, or any foreign material). **WARNING: Failure to observe this rule may result in injury and/or death to the shooter or bystanders and damage to property**.

7. Be sure of your target. Never fire your T/C Model R55 Semi-Auto Rifle unless there is a backstop behind your target. Never fire your rifle in the field unless you have a clear view of your target. Never fire at a noise or movement in the brush. If hunting with others always know where other members of your party are located. Never fire your rifle if there is a possibility that a member of your hunting party is down range. Never shoot at flat, hard surfaces such as rocks or water. **WARNING: A bullet may ricochet off these surfaces causing injury and/or death to the shooter or bystanders and damage to property**.

8. Respect the T/C Model R55 Semi-Auto Rifle. Used properly, your rifle will give you years of pleasure. Used improperly, carelessly or abused, your T/C Model R55 Semi-Auto Rifle is a dangerous instrument and is capable of causing serious injury, death or damage to property. Always treat your rifle as if it were loaded. Do not drop your rifle or allow it to be struck a blow. **WARNING: Dropping or striking it may cause damage to internal parts in such a manner as to cause an accidental discharge**.

9. The T/C Model R55 rifle has a manual thumb safety located on the right side of the receiver. (see Nomenclature diagram on Pages 6&7). This safety should be in the "ON" position (rearward) at all times, unless you are engaged in the actual firing of the rifle.

10. Although the T/C Model R55 has a manual safety, never depend on this feature alone to ensure against accidental discharge. Always follow the rules of safe gun handling. When not in use, it is an excellent idea to reinsert the plastic "Empty Chamber Indicator" into the chamber as a means of assuring yourself and others that there is not a cartridge present in the chamber.

11. The T/C Model R55 is shipped with a small padlock designed to be used to secure the rifle when stored. The safety must be in the rearward "ON" position in order for the hole in the back of the trigger guard to accept the shank of the padlock. The shank of the padlock should be inserted into the hole in the rear of the trigger guard and locked; the key removed and stored in a safe location. The red plastic Empty Chamber Indicator should be inserted into the empty chamber, and the bolt released forward to hold it in place.

The magazine should be empty (to release the bolt and allow it to go forward, the magazine will have to be removed).

12. Never use 22 "STINGER" cartridges in your T/C Model R55 .22 Long Rifle caliber rifle. Stinger cartridges have a longer case than 22 LR cartridges loaded to U.S. industry specifications. They are prone to stick in tight chambers which can result in a ruptured case and release of hot powder, gases and brass when fired. This can be hazardous to the shooter or bystanders.

13. T/C's Model R55 is a semi auto rifle, designed to be fired from the right shoulder. During the normal operation of this rifle, hot gasses and hot brass will be ejected. Your hands and face must be clear of the ejection of these gases and brass. As in shooting any firearm, proper eye and ear protection should be worn when firing this rifle.

14. The trigger of your T/C Model R55 rifle has been factory set. Do not attempt to alter this trigger.

15. The T/C Model R55 rifle is a semi auto rifle and, as such, may at times jam due to faulty ammunition, accumulated dirt, or a mechanical problem. Do not attempt to force a cartridge into the chamber, as a 17 Mach 2 cartridge or a 22 LR cartridge can be made to discharge before it is fully chambered. Handle "jams" in accordance with the section covering "jams" in this booklet.

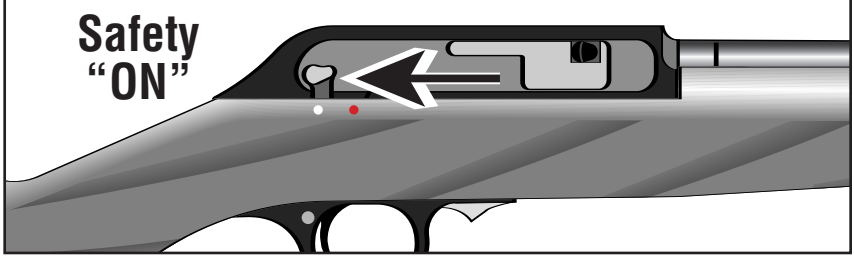
16. Protect your eyes and ears when firing your T/C Model R55 Semi-Auto Rifle. Always wear shooting glasses to protect your eyesight from air borne particles and ear protectors to guard against hearing loss due to loud noise when firing your rifle.

→⚠WARNING←

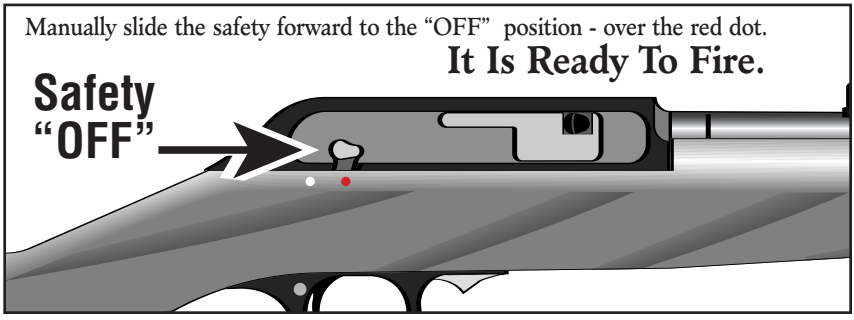
Do not assume that a familiarity with other firearms has equipped you with a knowledge of "safe gun handling", as these words apply to the T/C Model R55 Semi-Auto Rifle. Each gun is different, and functions differently. Although the T/C Model R55 Semi-Auto Rifle is equipped with a reliable safety, the user is responsible for practicing "safe gun handling" at all times. FAILURE TO DO SO CAN CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Operation of the T/C Model R55 Safety

Manually slide the safety rearward to the “ON” position - over the green dot.



Manually slide the safety forward to the “OFF” position - over the red dot.
It Is Ready To Fire.



The Model R55 safety can only be engaged in the rearward “ON” position when the hammer is cocked. You will be unable to engage the safety in the rearward “ON” position when the hammer is in the uncocked position.

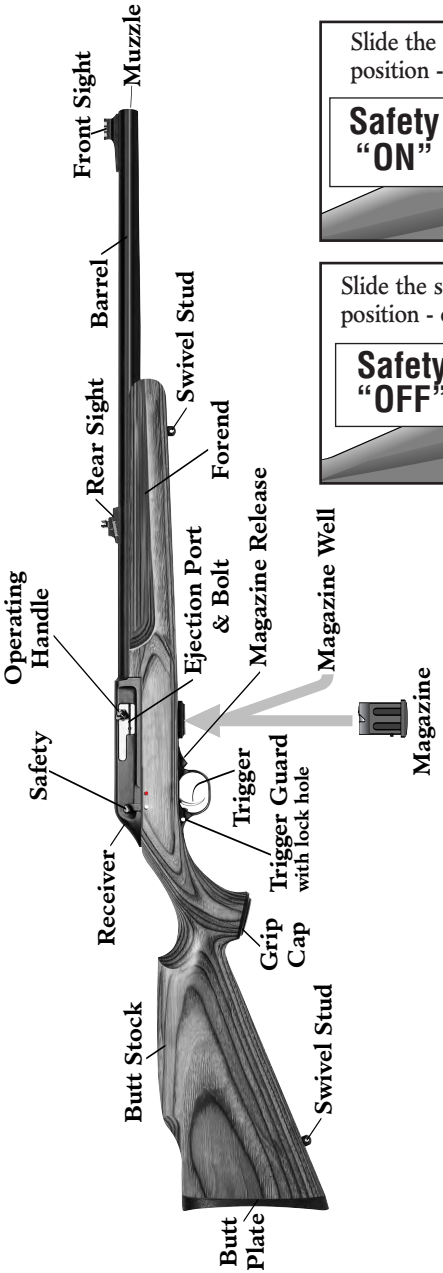
To cock the (internal) hammer, pull the operating handle fully rearward and release it. The hammer will then be cocked.

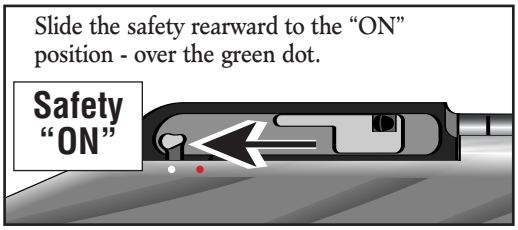
⚠WARNING

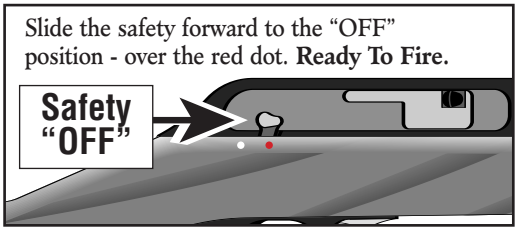
The safety of your T/C Model R55 should be in the rearward “ON” position at all times unless you are actually engaged in the act of shooting. FAILURE TO HEED THIS WARNING CAN CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

WARNING
Discharging firearms in poorly ventilated areas, cleaning firearms or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.

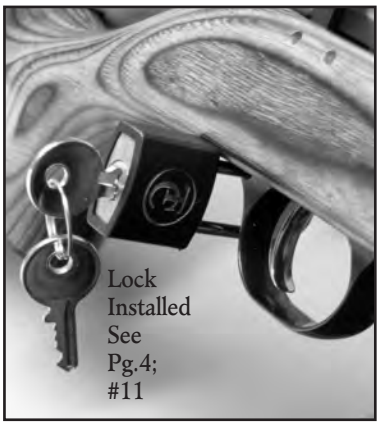
T/C Model R55 Nomenclature







Know your T/C Model R55 before attempting to use it. This booklet will help you become familiar with the various terms associated specifically with this type of firearm. The diagram on this page points out the more commonly referred to parts.



Operating the T/C Model R55

The T/C Model R55 Rifle is a blow-back operated semi-automatic rifle chambered for .17 Mach 2 ammunition or .22 Long Rifle ammunition. Only 17 Mach 2 ammunition should be used in rifles marked 17 Mach 2 caliber and only 22 Long Rifle ammunition, designated 22 Long Rifle should be used in those rifles so marked. Do not attempt to use .22 CB caps, 22 Shorts, 22 Longs or 22 Shot Cartridges in the rifle marked for 22 Long Rifle. Significant differences in cartridge dimensions and pressures may affect the reliability of feeding, chambering and extraction of these cartridges, causing an unsafe condition.

The T/C Model R55 is a magazine fed rifle. When the loaded magazine is inserted into the rifle, and the bolt is racked, it will strip a cartridge from the magazine and chamber the cartridge. The bolt will hold the cartridge in the chamber by pressure generated by the balance block spring. When the safety is moved to the "OFF" position and the trigger is pulled, the hammer will be released, striking the firing pin, and driving it into the rim of the cartridge containing the priming compound. The priming compound will detonate, and in turn will ignite the powder in the cartridge case, sending the bullet down the barrel towards the target.

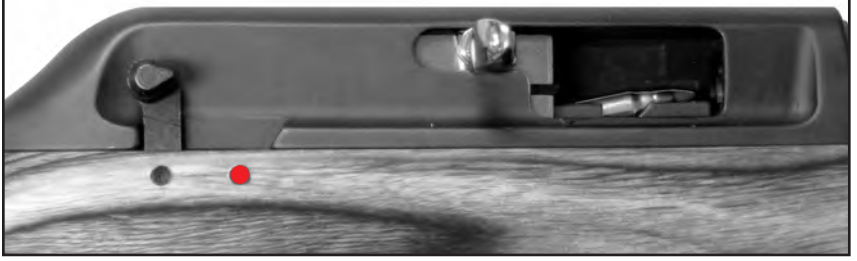
As the powder in the cartridge case burns, part of the energy created by the gas will cause the bolt to come back, "blowing back" the bolt fully rearward. As the bolt moves rearward, it will extract the empty cartridge case from the chamber, and then eject the empty case from the rifle.

Once the bolt has been driven rearward, past the magazine, its momentum will be reduced by the balance block spring and the bolt bumper. At this point the bolt will be pushed back forward by the balance block spring. As the bolt travels over the magazine it will strip a live cartridge from the magazine and proceed to chamber it. When the trigger is pulled, the cartridge will fire and the cycle will be repeated. When all of the rounds in the magazine and the one in the chamber have been fired, the bolt will remain locked in the rearward (open) position by the bolt stop.

⚠WARNING

The T/C Model R55 Rifle will fire a chambered cartridge with out the magazine in place. Do not assume that when you remove the magazine that you have unloaded the rifle - visually inspect the chamber to confirm that there is not a cartridge in the chamber. A LIVE CARTRIDGE COULD STILL BE IN THE CHAMBER AND BY PULLING THE TRIGGER AN ACCIDENTAL DISCHARGE COULD RESULT, CAUSING INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS, AND DAMAGE TO PROPERTY.

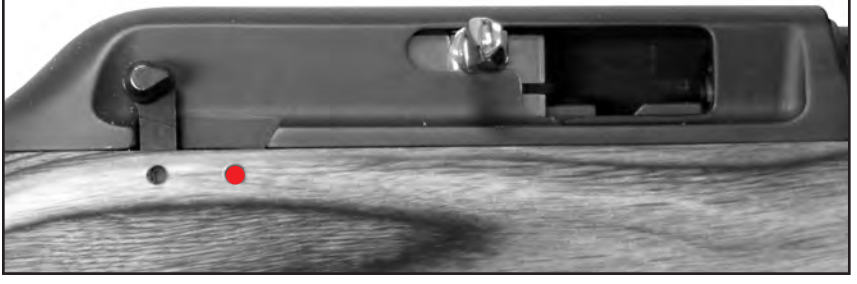
Bolt Back, magazine loaded, safety on.



Bolt forward, round chambered, safety off. **Ready To Fire**.

Bolt traveling back, empty case being ejected.

Bolt locked rearward by bolt stop, magazine empty - safety has been manually returned to the "ON" position.

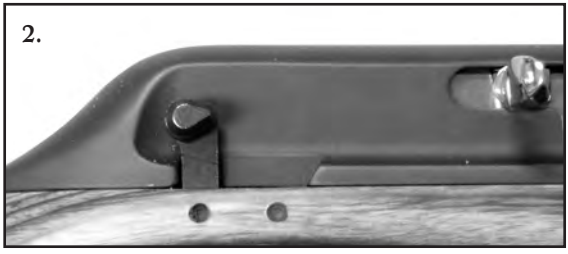


Inserting & Removing the Magazine From The T/C R55 Rifle

Once you have familiarized yourself with the general operation of your T/C Model R55 rifle, practice inserting and removing an **empty** magazine from the rifle. Do this as many times as it takes to make yourself proficient in this operation.

Procedure for removing the magazine from the T/C Model R55 rifle:

1. Keep the rifle pointed down range or in a safe direction.



2. Slide the manual thumb safety rearward into the "ON" position.

3. Pull back on the bolt handle. (with an empty magazine inserted, the bolt will remain locked in the rearward position)

4. Press the magazine release located at the front of the trigger guard, making sure that one of your hands is under the magazine to catch it and stop it from falling to the ground. (preventing any damage to the magazine).

Inserting the magazine into the action:
Ensure that the rifle's safety is in the "ON" position, and that the rifle is pointing down-range in a safe direction. Insert the magazine into the magazine well of the rifle, with the magazine catch in the rear of the magazine (see page 13). You will hear and "feel" a noticeable click as the magazine is fully seated and it engages the magazine catch in the trigger guard.

Understanding the Trigger Mechanism of the R55 Rifle

The T/C Model R55 Rifle is a semi automatic rifle. When a loaded magazine is inserted into the rifle and the bolt is forward with a round in the chamber, the rifle is ready to fire. When the safety is moved forward to the "OFF"position and the trigger is pulled, the rifle will fire, eject the empty cartridge case, feed in another live cartridge, and fire again when the trigger is pulled. It will continue to fire each time the trigger is pulled until all the cartridges in the magazine and the one in the chamber have been fired. At this time, the bolt will remain locked in the rearward position by the bolt stop.

When a loaded magazine has been inserted into the action and you pull fully rearward on the operating handle, and release it, the bolt will be driven forward and will strip a cartridge from the magazine and chamber it. **When the safety is off, the rifle will again fire one round each time the trigger is pulled.**

→⚠WARNING←

The safety of your T/C Model R55 should be in the rearward "ON" position at all times unless you are actually engaged in the act of shooting. FAILURE TO HEED THIS WARNING CAN CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Use the Correct Ammunition in the T/C Model R55 Rifle

For T/C Model R55 rifles marked 17 Mach 2 - use only commercially available 17 Mach 2 ammunition.

For T/C Model R55 rifles marked 22 Long Rifle - use only commercially available 22 long rifle ammunition. Do not use .22 CB Caps, 22 Short, 22 Long, or 22 Shot cartridges in your rifle that is marked 22 Long Rifle. Do not use 22 Stinger cartridges in your rifle that is marked 22 Long Rifle.

→⚠WARNING←

Always use the correct ammunition, as marked on the barrel of your rifle. It is the responsibility of the user to ensure the correct ammunition is being used. THE FIRING OF A CARTRIDGE OR SHELL OTHER THAN

THAT WHICH WAS ORIGINALLY INTENDED CAN RESULT IN THE CARTRIDGE CASE RUPTURING AND RELEASING HIGH PRESSURE GAS THAT CAN DESTROY THE FIREARM AND RESULT IN INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS, AND DAMAGE TO PROPERTY.

⚠WARNING

Never use 22 "STINGER" cartridges in your T/C Model R55 rifle that is marked for use with 22 Long Rifle. Stinger cartridges have a longer case than 22 LR cartridges loaded to U.S. industry specifications. They are prone to stick in tight chambers which can result in a ruptured case and release of hot powder, gases and brass when fired. THIS CAN BE HAZARDOUS TO THE SHOOTER OR BYSTANDERS AND CAN CAUSE DAMAGE TO PROPERTY.

Loading the T/C Model R55

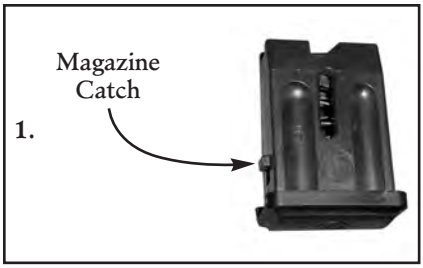
The T/C Model R55 is a magazine fed rifle. While pointing the rifle down range, place the safety in the "ON" position. Then, using the bolt handle, pull the bolt rearward. If the magazine is empty, the bolt will be locked in the rearward position by the bolt stop. Now, remove the magazine from the rifle by unlocking it with the magazine release button (located at the front of the trigger guard) and drawing the magazine down and out of the rifle. The bolt will remain rearward. Inspect the chamber to make sure that the rifle is unloaded. Also, check that the bore is free of obstructions. After ensuring that the chamber and bore are free of obstructions, set the rifle aside, making sure that the muzzle is pointed down-range in a safe direction. It is now time to load the rifle's magazine.

17 Mach 2 magazines have a Red follower
22 LR magazines have a Black follower

Loading the Magazine:

1. Hold the magazine with the rear of it toward your body; while grasping a cartridge in the other hand. The rear of the magazine will be the surface with the magazine catch that locks the magazine into the rifle.

2. Grasping the cartridge, press the rimmed end of the case straight down on the follower, keeping the cartridge perfectly vertical.



3. When the follower has been depressed, pivot the cartridge so that the rim is under the lips and push the cartridge fully to the rear of the magazine.

4. Once the cartridge has been seated, repeat the operation, pushing the next cartridge straight down on top of the previous cartridge, pivoting and pushing it completely to the rear of the magazine. The magazine provided with your rifle holds 5 cartridges.

Inserting the magazine into the T/C Model R55's action:

Ensure that the rifle's safety is in the "ON" position, and that the rifle is pointing down-range in a safe direction. Insert the magazine into the magazine well of the rifle with the bullets pointed toward the muzzle of the rifle (with the magazine catch to the rear).

The bolt of your Model R55 can be in 2 positions. It can be locked in the rearward position, held by the bolt stop, or it can be fully forward against the chamber of the barrel.

1. If the bolt is locked in the rearward position by the bolt stop, once the magazine is inserted into the action, release the bolt from its locked position by pulling slightly rearward on the operating handle and then letting go. The bolt will travel forward, strip a cartridge from the magazine and push it into the chamber. The rifle is now loaded. The safety should be in the "ON" position.

2. If the bolt is in the closed position, once the magazine has been seated, pull the bolt fully rearward by grasping the operating handle. When the bolt is fully rearward, release the operating handle. The bolt will move forward, strip a cartridge from the magazine and push the cartridge into the chamber. The rifle is now loaded and the safety should be in the "ON" position.

⚠WARNING

If the cartridge fails to fully enter the chamber, do not apply force to the bolt handle to aid in the chambering of the cartridge. If the cartridge does not fully chamber - eject it from the rifle. FAILURE TO HEED THIS WARNING MAY RESULT IN AN ACCIDENTAL DISCHARGE AND CAN BE HAZARDOUS TO THE SHOOTER OR BYSTANDERS AND CAN CAUSE DAMAGE TO PROPERTY.

Firing the T/C Model R55 Rifle

Once loaded, the TC Model R55 rifle is ready to fire. Bring the butt of the rifle to your shoulder, aim the muzzle at the intended target, slide the safety forward to the "OFF" position and pull the trigger. The rifle will now fire each time the trigger is pulled until all the cartridges in the magazine and the one in the chamber have been fired. Firing will automatically rechamber a cartridge and recock the (internal) hammer.

⚠WARNING

The safety of your T/C Model R55 should be in the rearward "ON" position at all times unless you are actually engaged in the act of shooting. FAILURE TO HEED THIS WARNING CAN CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Inspect the fired cartridge cases:
After firing a few rounds and before loading the magazine again, pick up and inspect some of the fired cartridge cases. Check the cartridge case head for cracks or splits. Any abnormalities of the empty cartridge cases could indicate a problem with your rifle. Do not attempt to fire the rifle if you observe any

abnormalities with fired cartridge cases. Send the **unloaded rifle** and **unloaded magazine** (do not send ammunition with the rifle) with a letter advising us of the problem, to the attention of Thompson/Center Arms Repair Department, Farmington Road, Rochester, New Hampshire 03867.

Clearing A Jam

If jamming occurs and a cartridge fails to feed properly into the chamber, stop what you are doing immediately, and make sure that the rifle is still pointed down range or in a safe direction. Slide the thumb safety rearward into the "ON" position.

⚠WARNING

If the cartridge fails to fully enter the chamber, do not apply force to the bolt handle to aid in the chambering of the cartridge. If the cartridge does not fully chamber - eject it from the rifle. FAILURE TO HEED THIS WARNING MAY RESULT IN A N ACCIDENTAL DISCHARGE AND CAN BE HAZARDOUS TO THE SHOOTER OR BYSTANDERS AND CAN CAUSE DAMAGE TO PROPERTY.

Start the clearing process by removing the magazine from the rifle. Then, pull rearward on the bolt. If the cartridge falls free, the jam has essentially been cleared. If, however, the cartridge is partially chambered, it will be necessary to extract it.

While you are pulling rearward on the bolt handle, insert a pencil (or wood dowel) into the magazine well and push up on the bolt lock, in order to lock the bolt rearward. (See page 18; "How to use the rifle in the single shot mode" for instructions on locking the bolt back manually).

Using a wooden tool (not your pocket knife) work it under the rim of the cartridge in order to slide the cartridge out and extract it. If, upon examining the cartridge, it appears damaged, dispose of the cartridge in accordance with the ammunition manufacturer's recommendation.

⚠WARNING

Do not use any type of steel tool like a knife blade or pliers when attempting to extract a live cartridge from the chamber of the rifle. Steel tools are hard and can ignite the primer of a rimfire cartridge when chambered, partially chambered or not chambered at all. An accidental discharge can result in injury and/or death to the shooter or bystanders and damage to property.

What causes Jamming:
Most malfunctions in a semi auto rifle will be in the form of "jamming"; failure to completely feed a cartridge into the chamber. "Jamming" is generally a result of

using a damaged or defective magazine, an accumulation of dirt, residue or oil which impedes the operation of the mechanism of the rifle, or specific ammunition which may have slightly different dimensions or characteristics.

A complete cleaning of a dirty or oily rifle will eliminate feeding problems generated by the accumulation of oil, dirt or powder residue. If your magazine is clean, and in working order with no apparent damage, try other brands of 22 LR ammunition. In some instances, different ammunition will perform differently.

If using other brands does not alleviate the problem, the rifle has been thoroughly cleaned, and "jamming" still continues, send the **unloaded rifle** and **unloaded magazine** (do not send ammunition with the rifle) with a letter advising us of the problem, to the attention of Thompson/Center Arms Repair Dept., Farmington Rd, Rochester, NH 03867.

If the T/C Model R55 rifle is dropped or struck a hard blow, the following steps should be taken

⚠WARNING

If a loaded rifle is dropped or struck a hard blow, with the safety off - the rifle may fire. Always keep the chamber empty and the safety "ON" unless you are in the process of actually firing the rifle. Any firearm may fire if dropped. FAILURE TO HEED THIS WARNING CAN CAUSE AN ACCIDENTAL DISCHARGE RESULTING IN INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

If your rifle is dropped or struck a hard blow, double check to make sure that the safety is still in the "ON" position. If it isn't, immediately engage the safety in the "ON" position. The magazine should be removed from the rifle and the action should be opened to remove any cartridge from the chamber. Check the bore for obstructions, and check the entire rifle for evidence of damage. If damage has occurred to the rifle, it should be taken to a qualified gunsmith or returned to the factory with a letter detailing the problem. Return the **unloaded rifle**, with the **unloaded magazine** to Thompson/Center Arms Repair Department, Farmington Road, Rochester, New Hampshire 03867.

Should you decide NOT to fire the T/C Model R55 at any time, you must take the following steps:

If, at any time you decide not to fire the rifle after having prepared to take a shot, the following procedure must be followed:
1. Keep the muzzle pointed in a safe direction; finger off the trigger.
2. Immediately put the safety into the "ON" position.
3. Remove the magazine from the rifle.
4. Pull the bolt rearward, ejecting the cartridge in the chamber. Inspect the chamber to ensure that the cartridge has been extracted. Only close visual inspection of the chamber can determine that no cartridge is left in the chamber of the rifle.

⚠WARNING

The Model R55 rifle will fire a round in the chamber when the magazine has been removed. Do not assume by removing the magazine that the rifle is not loaded. Visually inspect the chamber. FAILURE TO HEED THIS WARNING CAN CAUSE AN ACCIDENTAL DISCHARGE RESULTING IN INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Unloading the T/C Model R55

To unload the TC Model R55 semi-automatic rifle;

1. First, make sure the rifle is pointed down-range in a safe direction.
2. Immediately slide the safety into the "ON" position.
3. Remove the magazine from the rifle.
4. Pull back fully on the bolt operating handle and extract the cartridge from the chamber (ejecting the cartridge from the rifle in the process). Visually inspect the chamber to determine that the cartridge has indeed been extracted and ejected. If for some reason, the bolt has failed to extract the cartridge, you must do so manually with your fingers (use your fingers or a piece of wood).

Unloading the Magazine
When unloading the cartridges from the magazine it will be necessary to manually slide the top cartridge forward in the magazine until the rim clears the lips securing the cartridge. Use your fingers or a piece of wood. **Do not use metal, as a blow from the metal may cause the cartridge to ignite.** This operation must be repeated until all the cartridges have been slid from the magazine.

⚠WARNING

A sharp blow to a rimfire cartridge case may cause the cartridge to ignite. FAILURE TO HEED THIS WARNING CAN CAUSE AN ACCIDENTAL DISCHARGE RESULTING IN INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Using your T/C Model R55 Rifle in a single shot mode

The T/C Model R55 rifle has been designed to fire as a single shot rifle, without the magazine in place. This feature allows the rifle to be fired as a single shot should the magazine be lost or misplaced, or, it allows the rifle to be used as a beginner's rifle. Starting a new shooter off with a single shot rifle has almost become traditional in the aspects of proper firearms training. As the shooter becomes competent and proves his mastery of safe gun handling, he or she is then allowed the use of the magazine.

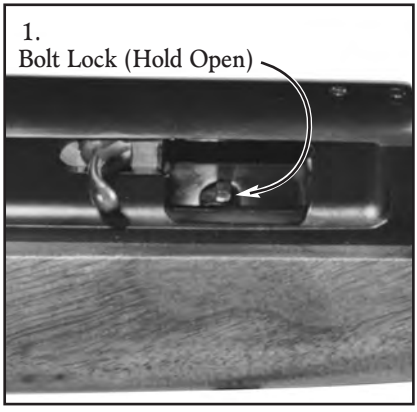
⚠WARNING

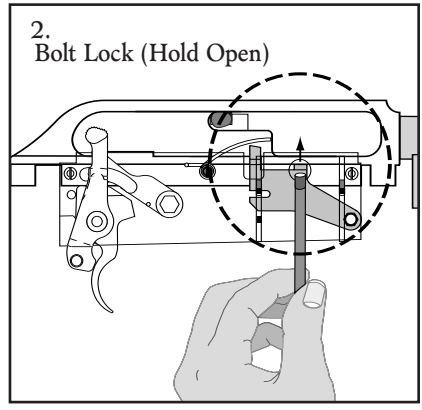
The safety of your T/C 22LR Classic should be in the rearward "ON" position at all times unless you are actually engaged in the act of shooting. FAILURE TO HEED THIS WARNING CAN CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

When loading T/C's Model R55 rifle, without the magazine, loading will be made easier when the shooter can lock back the bolt manually (without the magazine in place). Once the bolt has been locked back, the shooter can proceed to insert the 22 LR cartridge directly into the chamber manually. Once inserted, simply pull backwards on the bolt, release it, and it will travel forward coming to rest against the chambered cartridge.

To manually lock the bolt in the rearward position:

1. Pull rearward on the bolt handle until the bolt is fully rearward





2. Insert a pencil (or wood dowel) into the magazine well and press up on the

bolt lock. Once pressed, let up slightly on the fingers holding the bolt rearward. As you do this, you will feel the bolt catch on the bolt lock, losing its momentum to travel forward. Remove the pencil (or wood dowel) from the inside of the magazine well, and the bolt will be locked in the rearward position.

Practice this procedure until it becomes second nature to you.

Remember, the T/C Model R55 rifle **will fire without the magazine in place**. It is designed to do so.

⚠WARNING

The T/C Model R55 rifle will fire a chambered cartridge without the magazine in place. Do not assume that when you remove the magazine, you have unloaded the rifle. Visually inspect the chamber to assure that there is no cartridge in the chamber. A LIVE CARTRIDGE COULD STILL BE IN THE CHAMBER, AND BY PULLING THE TRIGGER AN ACCIDENTAL DISCHARGE COULD RESULT IN INJURY AND/OR DEATH TO THE SHOOTER OF BYSTANDERS, AND DAMAGE TO PROPERTY.

Disassembly of the T/C Model R55 Rifle

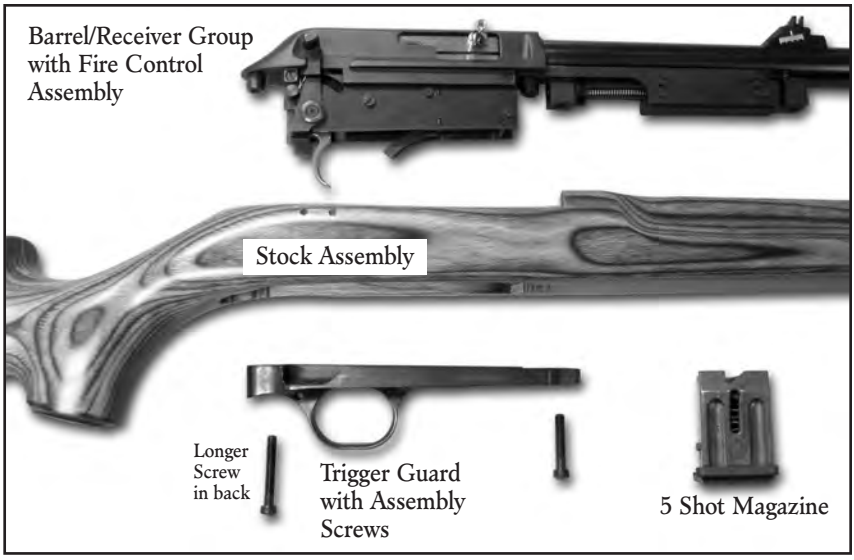
⚠WARNING

Before cleaning or working on the TC Model R55, always make sure the safety is "ON" and the Model R55 is unloaded; that the chamber is empty and that the magazine is out of the rifle, before attempting to disassemble any portion of the rifle. WORKING ON A LOADED RIFLE COULD RESULT IN AN ACCIDENTAL DISCHARGE WHICH COULD RESULT IN INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS, AND DAMAGE TO PROPERTY.

When disassembling the T/C Model R55, make sure that the safety is "ON" and that the rifle and magazine are unloaded. Keep the rifle pointed in a safe direction.

Now that the safety is "ON" (and the hammer is cocked) the rifle is now ready to disassemble.

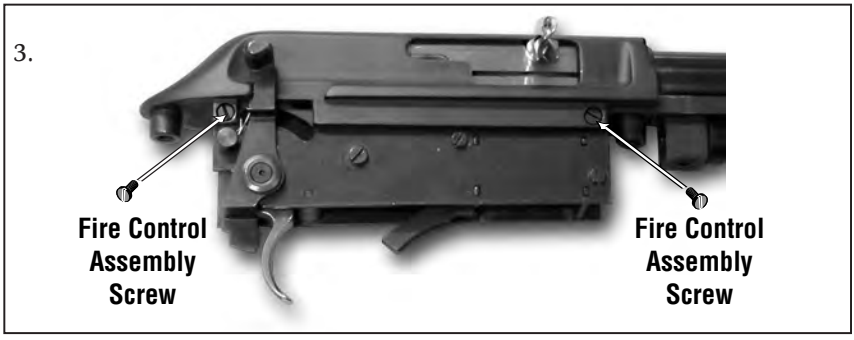
Initial Disassembly involves breaking the T/C Model R55 rifle down to 3 basic parts groups.



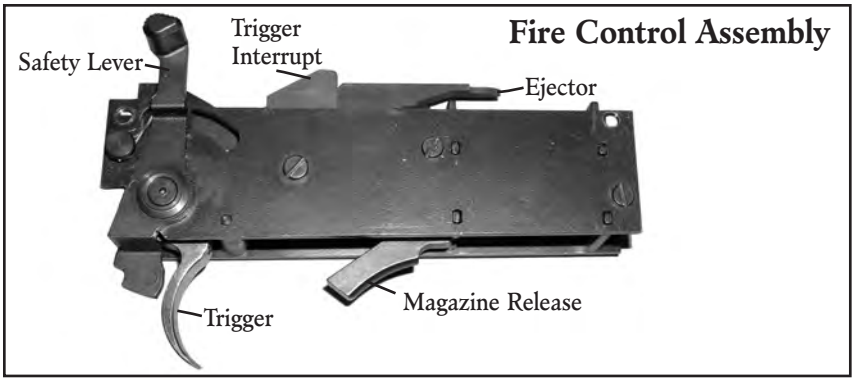
1. Remove the front and rear trigger guard screws. Once the screws are removed, pull the trigger guard assembly out of the stock. **The rear trigger guard screw is longer than the front screw - remember this for re-assembly.**

2. Next, lift the barrel/receiver assembly out of the stock. You have now disassembled the rifle into its 3 major assemblies. Further disassembly will entail removal of the fire control assembly and the bolt from the barrel/receiver assembly.

3. **When removing the fire control assembly from the barrel/receiver assembly**. Take out the front and rear fire control mounting screws on **both sides** of the receiver (four screws in all).

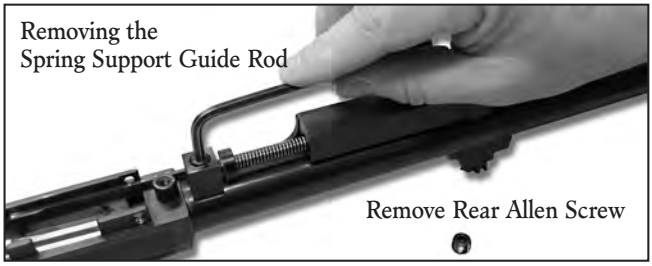


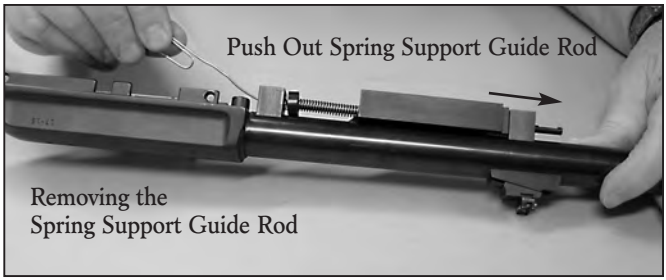
4. **Remove the fire control assembly**. The hammer must be in the cocked position; the safety in the "ON" position.



Note: Before reinstalling the fire control assembly into the barrel/receiver assembly, the hammer must be cocked and the safety in the "Safe" position. That should be the same condition which existed when you originally removed it, as there is no reason to release the hammer forward - you can clean behind the hammer with a brush or aerosol gun cleaner. But, if you have released the hammer to the "Fired" position - you will have to press down on the trigger interrupter while at the same time, cocking the hammer. The hammer will not stay in the cocked position unless the interrupter has been pushed down. Once the hammer is in the cocked position, move the safety to the safe position.

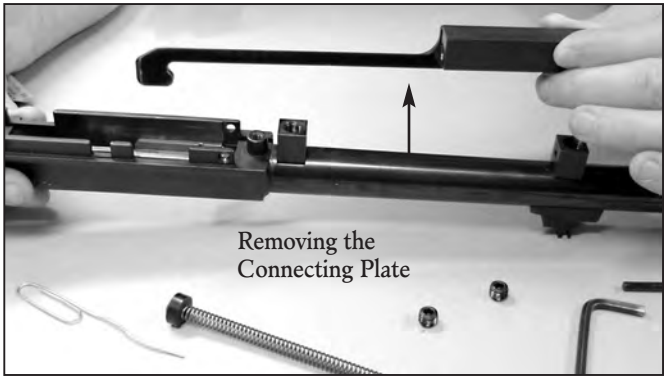
5. To remove the spring support guide rod from the barrel/receiver assembly, back out (or remove completely) the spring guide rod locking screws with a 5/32" Allen wrench.





6. Put on a pair of safety glasses as you will now be removing a spring which is under tension. Using a 1/16˝ punch, nail, or a large straightened paper clip, push through the hole in the spring guide rod standoff from the receiver end. Push towards the muzzle until the spring guide rod emerges approximately 1/2 from the forward standoff and you can grasp it with your thumb and forefinger.

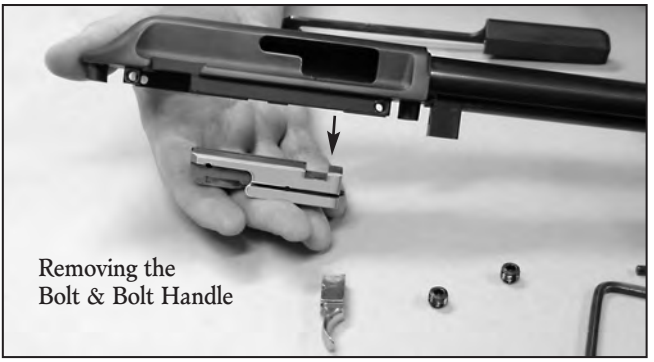
9. Holding the spring with your fingers with one hand, pull the spring support guide rod towards the muzzle with your other hand until the spring is free from the rod. It is still under tension; do not let it go. Pull the spring out of the standoff at the receiver end and remove it. Note: 17 cal rifles will have a plastic bumper at the end of the spring nearest the receiver. This bumper has a flat area that makes contact with the barrel. When reassembling, this flat area must be down on the barrel (see Photo A on page 23). 22 cal rifles will have no spring bumper.



10. Remove the spring support guide rod completely. Note: the flat area on the rod. It will be up, away from the barrel. It must be in this position when reassembling. (see Photo B on page 23)

11. Remove the connecting plate.

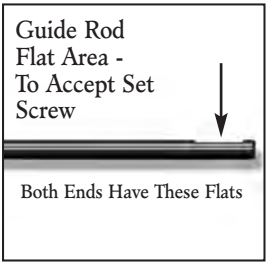
12. Turn the receiver over and remove the bolt. It will drop out so make sure you are working on a bench or table so it doesn't fall to the floor.



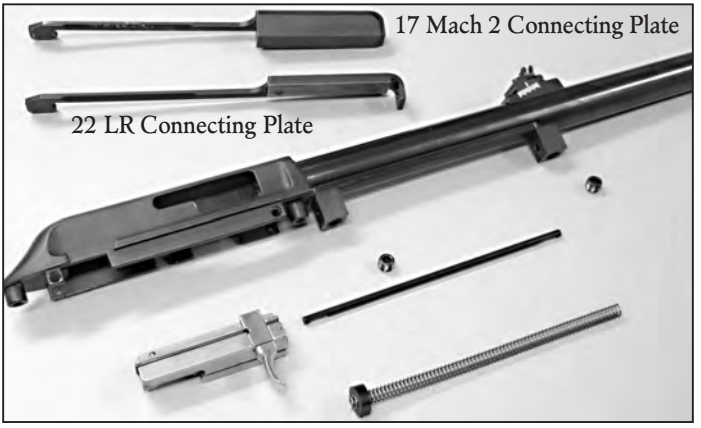
13. The fire control assembly has now been disassembled. No other disassembly is required. There is no need to ever remove the spring guide rod standoffs.

A

B



The Model R55 rifle has now been disassembled.
We do not recommend further disassembly beyond this point, with the exception of the magazine. If further disassembly is required, bring the rifle to a qualified gunsmith, or return it to the repair department at Thompson/Center Arms. Thompson/Center Arms Repair Department, Farmington Road, Rochester, New Hampshire 03867.



Assembly of the T/C Model R55 Semi Auto Rifle

When reassembling the rifle, reverse the disassembly procedures. Make sure that when you reinstall the spring support guide rod that the flat area is up, away from the barrel. When reinstalling the spring on the spring support guide rod, make sure (if it is a 17 cal rifle) that the flat area of the spring bumper is down, resting on the barrel. When reassembled, check the functioning by moving the bolt handle rearward and forward. (Moving the connecting plate rearward will not move the bolt rearward.)

R55 Trap Door in Buttplate

Your R55 rifle will have a trap door in the butt plate - this cavity allows you to carry a spare 5-shot or 10-shot magazine, readily available.

WARNING

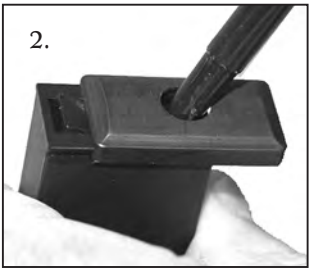
Discharging firearms in poorly ventilated areas, cleaning firearms or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.

Disassembly of the T/C Model R55's Magazine

1. Press in on the magazine spring detent located at the base of the magazine.

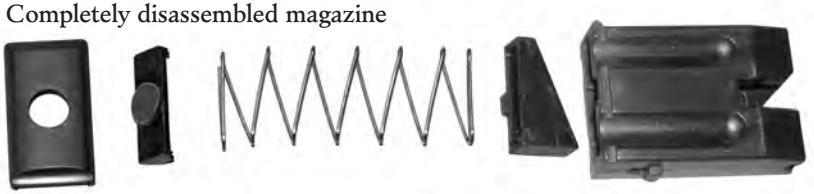
2. While pressing in, slide the base off the magazine slowly.

3. The magazine base will be under tension of the magazine spring, so you will have to use the thumb of your other hand to control the spring as the base clears the spring. The spring will "jump" out of the magazine unless it is contained by your thumb pressure. Once the spring is contained, remove it from the magazine.



4. Thoroughly clean the inside of the magazine and lightly lubricate it. Wipe the spring off and lightly lubricate it as well.

Completely disassembled magazine



Cleaning the T/C Model R55

⚠WARNING

Always make sure that the safety is "ON" and that the chamber is empty, and the magazine has been removed from the rifle before attempting to clean your Model R55 rifle. Working on a loaded rifle could result in an accidental discharge. AN ACCIDENTAL DISCHARGE CAN RESULT IN INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS, AND DAMAGE TO PROPERTY.

Normal cleaning of the T/C Model R55 rifle requires putting the safety "On" and opening the action (pulling the bolt rearward with an empty magazine in place so that it locks rearward by the bolt stop). Remove the magazine, and run a few patches saturated with any high-grade gun cleaning solvent through the bore, from the muzzle end. Use of a bronze bore brush may be necessary periodically to eliminate leading. When running anything through the bore from the muzzle end, care should be taken to avoid unnecessary contact between the cleaning rod and the crown of the muzzle. In fact, it is a good idea to use a bore guide, designed to protect the crown of your muzzle, when using a cleaning rod from the muzzle end of any rifle.

For more extensive cleaning, disassembly of the rifle, (either to the 3 primary subassemblies, or further to include removing the bolt and the fire control assembly) may be necessary. Cleaning all of the parts and components and lightly lubricating them will help maintain your rifle and keep it in good working order.

Barrel Obstructions

⚠WARNING

FIRING A FIREARM WITH AN OBSTRUCTED BARREL COULD CAUSE A BURST BARREL AND INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Before loading the Model R55 rifle, check the chamber and bore to ensure that they are free of obstructions (cleaning patches, excess oil, mud, snow, or other foreign matter). Running a cleaning rod down the bore from the muzzle end is a good way to check.

If the rifle is dropped, ensure that the safety remained in the "ON" position. Unload the rifle, remove the magazine and inspect the rifle to ensure that the bore has not become clogged with dirt, snow, twigs, or other foreign material. Running a cleaning rod down the bore from the muzzle end is a good way to check for any obstruction.

If, when firing, the report is weak or peculiar, stop immediately - return the safety to the "ON" position. Inspect the bore for a stuck bullet. If the bore is obstructed, **do not continue to fire the rifle.** Return the **unloaded rifle** and **unloaded magazine** to the Thompson/Center Service Department, Farmington Road, Rochester, New Hampshire 03867, with a letter outlining the problem.

Failure to Fire

If the Model R55 rifle fails to fire, keep the rifle pointed down range (or in a safe direction) for at least 30 seconds. If, after 30 seconds, the rifle has still not fired, remove the magazine and pull the bolt rearward, locking it rearward by pressing up on the bolt stop. **Put the safety in the "ON" position.** If the cartridge has not been extracted from the chamber, manually extract it, as explained on page 15 "Clearing a Jam" in this manual). Inspect the cartridge case for firing pin indentation. If the rim appears to have a solid firing pin indentation, the misfire could have been a result of a faulty cartridge. Dispose of the cartridge in accordance with the ammunition manufacturers recommendation.

If, on the other hand, the firing pin indentation appears weak and is barely noticeable, it may be that the firing pin is being prevented from making full contact on the rim of the case by oil, dirt or other debris. Make sure that the bolt has been thoroughly cleaned (see section on cleaning). If weak "hits" persist, you should return the **unloaded rifle** and **unloaded magazine** to the Thompson/Center Service Department, Farmington Road, Rochester, New Hampshire 03867.

→⚠WARNING←

Always keep the muzzle of your firearm pointed down range for at least 30 seconds if the cartridge does not fire after pulling the trigger. The possibility of a "hang fire" (delayed ignition) could exist, and a misdirected muzzle could lead to the bullet being directed in a dangerous direction, THEREBY CAUSING INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

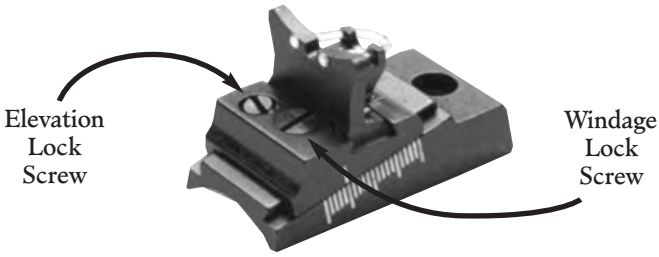
Iron Sight Adjustment for the T/C 22 LR Classic rifle

The T/C Model R55 is equipped with a standard rifle rear sight that features a fiber-optic insert (Diagram "A" Below) which is adjustable for elevation by moving the "blade" up or down on a ramp to change the point of impact. To do

this, turn the Elevation Adjustment Lock Screw counterclockwise (as viewed from the top) and slide the blade carrier up the ramp to raise the point of impact, and down the ramp to lower the point of impact. Retighten the lock screw after you make your adjustment and before you fire.

To adjust the windage it is necessary to move the rear sight leaf left or right in its slot. After loosening the Windage Lock Screw by turning it counterclockwise (as viewed from the top), move the rear sight blade in the direction you want your shots to hit-- (Example; move the sight blade to the right to move your shots to the right and to the left to move the shots to the left). Retighten the lock screw after you make your adjustment and before you fire.

Diagram A



Mounting A Scope On The T/C 22 LR Classic

The receiver is factory drilled and tapped for a T/C scope mount base. The Weaver-Style Mounts which are appropriate for this rifle are T/C Part No.9951 Follow the instructions that came with your scope mounts for proper mounting of your scope. Questions should be addressed to our Service Department, at Telephone #603-332-2333.

⚠WARNING

Make sure the T/C Model R55 is unloaded, with the action open before adjusting the rear sight or mounting a scope. AN ACCIDENTAL DISCHARGE CAN CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Custom Alterations & Conversions

Thompson/Center Model R55 Rifles which are subjected to custom alterations or conversion other than those performed by the Thompson/Center Custom

Shop are not covered by our warranty. Thompson/Center does not endorse or recommend any type of alteration other than those performed by the Thompson/Center Custom Shop. Responsibility for other conversions rests solely with the gunsmith performing the conversion.

⚠WARNING

If work is done improperly or without proper judgement, THE FIREARM CAN MALFUNCTION, CAUSING INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Service for your T/C Model R55 Rifle

Should your firearm require adjustment, repair or refinishing, we strongly recommend that the rifle be returned to the factory. There is no other way to ensure that the work will be done by a competent staff or trained technicians. Send your rifle back to the factory **unloaded** with the **magazine unloaded** and a letter describing the problem.

The rifle should be sent prepaid (**we will not accept collect shipments**). Do not include rifle case, sling, scopes or other custom accessories, to include packaging and literature that you consider to be collectable. These items may be damaged or lost in transit.

The Federal Gun Control Act allows an individual (who is not otherwise barred from purchasing or possessing a firearm) to ship a firearm directly to the manufacturer for purposes of repair. However, before shipping your rifle to us, be certain that your state and local laws permit such shipments and that they will also permit us to return the rifle directly to you. If receiving a rifle is not permitted, then arrangements will have to be made to ship your rifle to a Federally Licensed Firearms Dealer. We will need a signed copy of that dealers Federal Firearms License (F.F.L.).

Rifles returned to the factory should be marked for the attention of the service department. A letter of instructions should be enclosed with the gun. Adherence to these suggestions will prevent loss of time and facilitate handling at the factory.

Our service department will give your rifle a complete inspection. They will evaluate the problem or problems specified in your covering letter. If the work required is not covered by our "Lifetime Warranty" you will receive a quotation which must be authorized by you. No actual work will be done without your approval.

Ship complete rifles via U.P.S. or Parcel Post. The shipment should be insured.

Statement of Liability

This gun is classified as a FIREARM OR DANGEROUS WEAPON and is surrendered by us with the express understanding that we assume no liability for its resale or safe handling under local laws and regulations. Thompson/Center Arms assumes no responsibility for physical injury or property damage resulting from either intentional or accidental discharge, or for the function of any gun subject to influences beyond its control, and will honor no claims which may result from careless handling, unauthorized adjustments, defective or improper ammunition, corrosion or neglect. For your protection, examine your gun carefully at the time of purchase. Fill out and mail the registration card promptly. Be certain that it bears the gun's serial number which you will find on the receiver.

T/C Model R55 Rifles which are subjected to custom alterations or conversion other than those performed by Thompson/Center Custom Shop are not covered by the warranty. Thompson/Center does not endorse or recommend any type of custom alteration other than those performed by the Thompson/Center Custom Shop. Responsibility for such conversions rests totally with the gunsmith performing the conversion.

⚠WARNING

Work done improperly or without proper judgement on a T/C Model R55 Rifle could result in an unsafe firearm, THE FIREARM COULD THEN RUPTURE OR MALFUNCTION CAUSING INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Limited Lifetime Warranty

Thompson/Center Arms provides a warranty for all factory finished firearms for the Lifetime of the original consumer purchase. Any such firearms or part thereof returned, postage paid, to the factory at Rochester, New Hampshire, 03867, will be repaired or replaced to our commercial standards free of charge, and returned to the consumer purchaser postage prepaid. This warranty is established by return of our authorized warranty card which should be done within thirty (30) days of purchase.

This warranty does not cover any damage caused by custom alteration of the firearm! Services performed by the Thompson/Center Custom Shop do not void the warranty. Thompson/Center Arms reserves the right to refuse to repair or replace firearms, or parts thereof, damaged by abuse or misuse. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Address all correspondence and inquiries to the address shown on the cover of this booklet.

Statement Issued by Sporting Arms & Ammunition Manufacturers Institute (SAAMI). Unsafe Arms and Ammunition Combinations

Ammunition used in a firearm must be the same caliber or gauge as that marked on the firearm by its manufacturer. If the firearm is not marked as to caliber or gauge, or if it appears that the original marking has been overprinted or changed, it is the responsibility of the gun user to have a qualified person determined what cartridge or shell can safely be used in the firearm.

The firing of a cartridge or shell other than that for which the firearm is chambered can result in the cartridge or shell rupturing and releasing high pressure gas that can damage or destroy the firearm and kill or seriously injure the shooter and persons nearby.

There are countless combinations of specific cartridges and firearm chambers which are unsafe. Many of these unsafe combinations are recognizable because of significant dimension differences between the cartridge and the firearm chamber.

Dangerous combinations may also have similar chamber and cartridge dimensions. It is not possible to list every unsafe combination; therefore, in the interest of safety, use only the cartridge (or shell) designated by the firearm or ammunition manufacturer for use in a specific firearm. The cartridge caliber or shotshell gauge must be marked on the firearm frame, receiver or barrel by its manufacturer.

The practice of rechambering firearms is not guided by industry standards. It is possible that a firearm which has been rechambered may not be rechambered properly or the rechambered caliber may not be marked on the firearm. The firearm user is responsible to find out from a qualified person the cartridge caliber or shell gauge for which the firearm has been rechambered.

Shipping Information

T/C Shipping Address
Thompson/Center Arms Company, Inc.
Farmington Road
Rochester, New Hampshire 03867

T/C Mailing Address

Thompson/Center Arms Company, Inc.
P O Box 5002
Rochester, New Hampshire 03866

T/C Model R55 Repair Parts

To those who purchase parts for the T/C Model R55 rifle. Thompson/Center Arms is not responsible for repair of the T/C Model R55 rifle unless the work is done at our factory by our factory service department. There is no other way to ensure that the work will be done by a competent staff or trained technicians. We strongly recommend that T/C Model R55's needing repair are returned to the factory.

Consumers, dealers or gunsmiths who order individual parts must accept the responsibility for the correctness of the part itself. Equally, it is the installers responsibility to ensure that each part is properly fitted and functioning as an intricate part of the overall mechanism.

⚠WARNING

Improperly fitted parts can result in a dangerous malfunction, causing injury and/or death to the shooter or bystanders and damage to the firearm. The purchaser and installer must accept full responsibility for the correct adjustment and proper overall functioning of the entire mechanism after such installation of parts.

For Your Records

Important Note: For fire, theft and insurance purposes, retain this record with your important papers.

My Thompson/Center:_____

Was Purchased From: _____

On (date): _____ 20_____

Serial Number: _____ Caliber: _____

Accessories: _____

Owner Registration Card Mailed on: _____

Notes: _____

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This area is provided for your convenience. We suggest that you make a list of important information that pertains to your specific firearm (best performing load, etc.). Keep this booklet with your firearm and review your notes before each hunting season or whenever the firearm has not been used for extended periods.

Thompson/Center

R55

Owner's Manual

03/05

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